The Case for Ethical Stem Cell Research

Embryonic Stem Cell Research Has Failed to Produce Any Cures or Treatments

After nearly a decade of research on human embryonic stems cells, three decades of research on animal stem cells, and over $100 million in federal funding, embryonic stem cell research has yet to deliver any cures or treatments. There are zero human clinical trials or proven therapies using embryonic stem cells.

Ethical Alternatives to Embryonic Stem Cells Exist

Embryos are not the only source of stem cells. Every one holds an unknown amount of stem cells that can be derived without harm or injury. These "adult" stem cells are capable of transforming into countless cell and tissues types have been located throughout the human body, including in the brain, muscles, blood, placentas and even in fat. Recently germline stem cells from testes have been successfully reprogrammed into "pluripotent" adult stem cells with the same potential of embryonic stem cells. Furthermore, scientists are relatively close to developing a procedure called Altered Nuclear Transfer (ANT) that would create a cell that is not an embryo but possesses many of the same genetic qualities and provide ethical alternatives to destroying living human embryos.

Stem Cells from Ethical Sources Are Now Treating Over 70 Diseases and Afflictions

Every useful stem-cell therapy developed to date has not required the destruction of human embryos. According to a June 2004 report prepared by the National Institutes of Health (NIH), adult stem cells and stem cells from cord blood are currently being utilized to treat over 70 diseases and the NIH is funding another 330 human clinical trials using these cells. Adult stem cell research has revealed potential treatment and cures for afflictions such as Buerger's disease, bladder disease, lupus, heart failure, stroke, liver failure, nerve regeneration, genetic metabolic disease, and respiratory conditions such as emphysema and pulmonary fibrosis. Other studies have shown that adult stem cells hold great potential to treat Parkinson's and diabetes. When asked at a June 2006 Senate hearing about the best avenues of research that could be pursued, Dr. James Battey, the director of the NIH Stem Cell Task Force responded, "to me, the very most interesting thing is… this frontier area of nuclear reprogramming, where you take a mature adult cell type and you effectively de-differentiate it back to the a pluripotent state."

Ethical Alternatives Should Be Pursued Rather Than Seeking to Save Life By Destroying Life

We all desperately want to find cures for the diseases that afflict our friends, families and neighbors. Yet in our quest to find these cures, we must not ignore or rationalize the tremendous moral questions posed by destroying living embryos, which is undeniably human life in its earliest stages. We are fortunate that ethical alternatives to destructive embryonic stem cell research exist and it is imperative that we first pursue these ethical alternatives before even considering investing in research that requires destroying life to save life.

Embryonic Stem Cell Research Diverts Funding Away From More Promising Research

Over the past five years, Congress has increased funding for ESCR every year and increased annual funding almost four-fold, despite zero results. This bill seeks to increase federal ESCR funding even more, despite the lack of results and the existence of ethical alternatives that has a multitude of proven results and offers countless benefits from future research. Every dollar spent on research that does not yield results is one less dollar that could have been invested in research on ethical alternatives that are already yielding cures.

Embryonic Stem Cells Have Dangerous Side Effects That May Require Other Unethical Practices to Remedy

In experiment after experiment, embryonic stem cells have demonstrated that they may be too carcinogenic for therapeutic purposes. It is not uncommon in experiments on mammals for the animals to be killed by cancerous tumors. Uncontrollable growth of cells is one of the main reasons embryonic stem cells can not be tested in human subjects. As a consequence, cloning embryos and then destroying them to extract their stem cells or allowing embryos to develop into fetuses so that their organs can be cultivated may be the next step, but both techniques pose additional scientific and ethical dilemmas.

Adult Stem Cells Have Consistently Outperformed Embryonic Stem Cells for Therapeutic Purposes

Virtually every breakthrough announced using embryonic stem cells in animal models has been preceded by a similar feat with often greater results using adult stem cells.

Very Few "Surplus" Embryos Are Available for Research

Proponents of destructive embryonic stem cell research claim that surplus embryos "are going to be discarded anyway." A RAND study has found that to the contrary, very few embryos are expected to be discarded. The vast majority — 88.2 percent are designated for family building and another 2.3 percent are being donated to other families for adoption. According to the RAND study, embryos available for research do not have high development potential and very embryonic stem cell lines could be created from the embryos available for research. This means that embryos would have to be created specifically for destruction is additional stem cell lines were to be created for research.

Patients Need Cures Not False Hopes

Leading proponents of research on embryonic stem cells are themselves lowering expectations that dramatic cures to diseases such as Alzheimer's. The Guardian newspaper recently reported that Lord Winston, the most prominent embryonic-stem-cell researcher in the United Kingdom, said that hopes for cures had been distorted by arrogance and spin. "I view the current wave of optimism about embryonic stem cells with growing suspicion," Winston told the British Association for the Advancement of Science. A leading embryonic stem cell researcher in South Korea who hailed some of the most promising advances in the field has admitted to falsifying his research. Exaggerated predications and expectations used to promote embryonic stem cell research exploit patients and families desperately seeking cures.